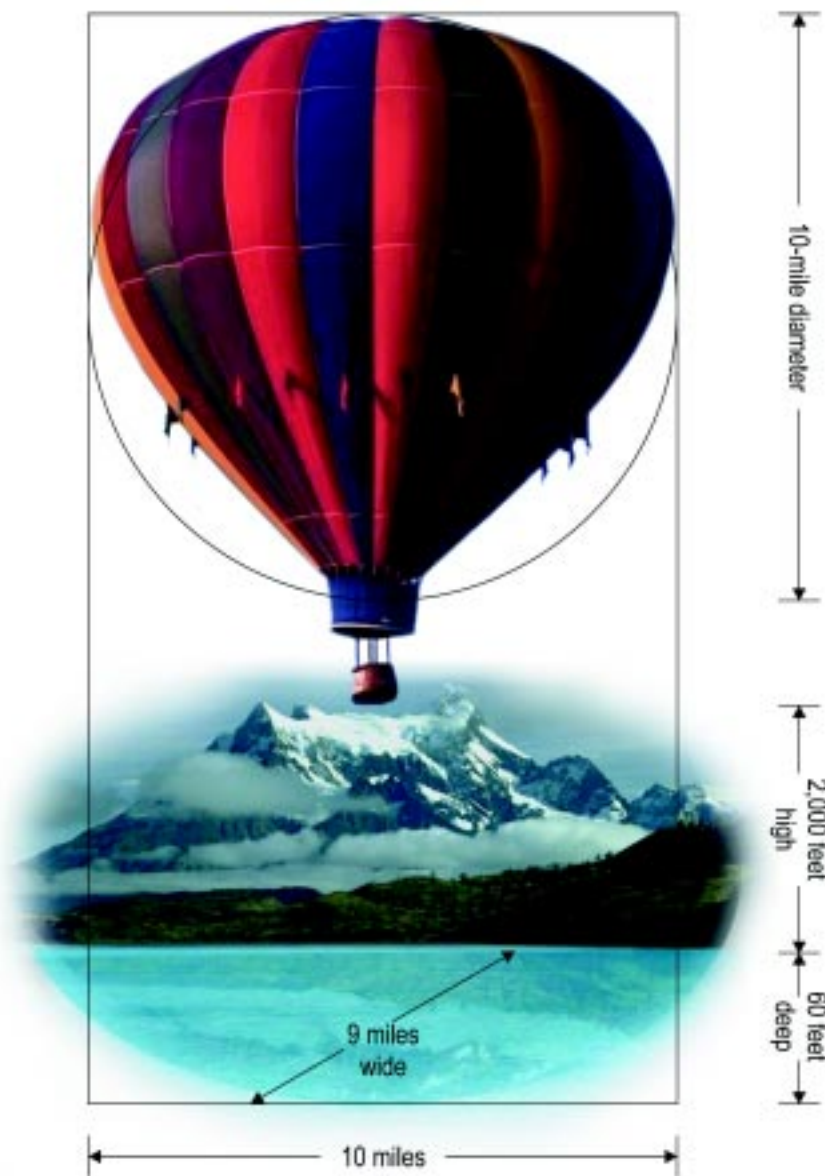




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Energy Solutions for the 21st Century

U.S. DEPARTMENT OF ENERGY • OFFICE OF FOSSIL ENERGY
FEDERAL ENERGY TECHNOLOGY CENTER



Rita A. Bajura
Director, FETC

Welcome From The Director



Federal Energy
Technology Center,
Pittsburgh, Pennsylvania

Welcome to the premier issue of *FETC Focus*. FETC, or the Federal Energy Technology Center, is a field office of the U.S. Department of Energy's Office of Fossil Energy. The Center is located in Morgantown, West Virginia, and Pittsburgh, Pennsylvania.

FETC's mission—*solving national energy and environmental problems*—is achieved through partnerships we forge with private industry, universities, and national labs to develop advanced energy and environmental technologies. Our interest doesn't stop there. FETC's success is measured by the private-sector acceptance of these new energy and environmental technologies that help our nation maintain a clean, affordable energy supply.

This premier issue focuses on clean energy solutions for the 21st century. There is much discussion today concerning the use of fossil fuels and the possible need to reduce greenhouse gas emissions, primarily carbon dioxide. Fossil fuels currently supply 85 percent of U.S. energy needs. At FETC,

we believe fossil fuels will continue to make up a significant portion of our nation's energy mix. Our research program provides options to ensure that

these fuels can be used without compromising our environment.

The advanced, high efficiency, coal- and gas-fired, power generation systems that FETC is developing will reduce electricity costs, and will use our natural resources more effectively while reducing CO₂ emissions. Developing technologies that economically recover methane hydrates also will help ensure an adequate supply of natural gas to meet U.S. demand.

This issue of *FETC Focus* shares with you a vital part of what FETC is and what we do. Future issues will give you additional insight into the only national energy technology center in the United States.

I hope you enjoy our inaugural issue of *FETC Focus*. This magazine is an important step in communicating with you, our stakeholders, and providing you with information on our ongoing activities. Your comments, questions, and suggestions for future story ideas are always welcome. FETC is also interested in your ideas on our program direction, and on the characteristics of the markets we address. As always, we look to serve you better. 



Federal Energy Technology Center,
Morgantown, West Virginia

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Cover photo illustrates annual world fossil-energy use—a mountain of *coal* 2,000 feet high and 10 miles long; a lake of *oil* 10 miles long, 9 miles wide, and 60 feet deep; and a balloon of *gas* 10 miles in diameter.